

WHAT IS CLAIMED IS:

1. A vehicle headlamp apparatus comprising:

optical axis direction changing means for changing the direction of a light-emitting optical axis of a headlamp of a
5 vehicle;

a sub-control circuit provided integrally on the headlamp for controlling the optical axis direction changing means; and
a main control circuit for sending out to the sub-control circuit a control signal for changing the direction of the
10 optical axis of the headlamp,

wherein the sub-control circuit comprises a power-on resetting circuit for implementing a reset by switching on and off a power supply, and

wherein the main control circuit comprises power supply
15 control means for temporarily cutting off the supply of power to the sub-control circuit when the main control circuit detects an abnormality in the sub-control circuit.

2. A vehicle headlamp apparatus according to Claim 1,

20 wherein the main control circuit makes the power supply control means to continue to maintain the power supply cut off state when the main control circuit repeatedly detects an abnormality in the sub-control circuit after the power supply control means has been activated.

3. A vehicle headlamp apparatus according to claim 1,
wherein the main control circuit sends out a request-a-reply
signal to the sub-control circuit and activates the power supply
control means when no appropriate reply signal to the
5 request-a-reply signal is sent back from the sub-control
circuit.

4. A vehicle headlamp apparatus according to Claim 1,
wherein the main control circuit activates the power supply
10 control means when a reply signal is sent thereto from the
sub-control circuit to which no request-a-reply signal has been
sent out therefrom.

5. A vehicle headlamp apparatus according to claim 2,
15 wherein the main control circuit sends out a request-a-reply
signal to the sub-control circuit and activates the power supply
control means when no appropriate reply signal to the
request-a-reply signal is sent back from the sub-control
circuit.

20

6. A vehicle headlamp apparatus according to Claim 2,
wherein the main control circuit activates the power supply
control means when a reply signal is sent thereto from the
sub-control circuit to which no request-a-reply signal has been
25 sent out therefrom.

7. A vehicle headlamp apparatus according to claim 2,
wherein a fail safe is executed in which the optical axis is
reset to an initial position when the power supply is maintained
5 in cut off state.

8. A vehicle headlamp apparatus according to claim 1,
wherein the light-emitting optical axis of the headlamp is
changed in its direction horizontally according to the steering
10 angle of the steering wheel of the vehicle.

9. A vehicle headlamp apparatus according to claim 1,
wherein the optical axis direction changing means and the
sub-control circuit are integrally accommodated as a single
15 unit.